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PATENT APPLICATION

ATTORNEY DOCKET NO. 10002651 -1IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Kurt E. Spears et al

Confirmation No.: 5042

Application No.: 09/769721

Examiner: Aggarwal, Yogesh K.

Filing Date: Jan 25, 2001

Group Art Unit: 2622

Title: Photosensor Array Using Segmented Charge Transfer Gates (as Amended)

Mail Stop Appeal Brief - Patents  
Commissioner For Patents  
PO Box 1450  
Alexandria, VA 22313-1450TRANSMITTAL OF REPLY BRIEFTransmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on April 23, 2007.

This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)

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Respectfully submitted,

Kurt E. Spears et al

By Augustus W Winfield

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IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Kurt E. Spears

Serial No.: 09/769,721

Examiner: Aggarwal, Yogesh K

Filing Date: 01/25/2001

Group Art Unit: 2622

Title: PHOTOSENSOR ARRAY USING SEGMENTED CHARGE TRANSFER GATES

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria VA 22313-1450

REPLY BRIEF

## CLAIMS 1 AND 4 IN LIGHT OF GROUNDS OF REJECTION #1

Claim 1 specifies:

activating a particular section of a charge transfer gate, where the charge transfer gate has a plurality of sections, each section individually controllable, and fewer than all the sections are activated;

transferring charges, from a contiguous block of the photosensors, through the particular section of the charge transfer gate, to a charge shift register;

Claim 1 specifies: activating a particular section of a charge transfer gate. In the Examiner's Answer, at page 7, by the examiner's own description, Yonemoto activates two different sections at two different times. One section is activated by signal V2a at time t2, and a different section is activated by signal V2b at time t4.

Claim 1 also specifies that fewer than all the controllable sections are activated. The examiner characterizes the two sections activated by signals V2a and V2b as one section.

Assuming for the sake of argument that is examiner is correct, then all controllable sections (as defined in claim 1) are activated, thereby conflicting with claim 1.

First, some terminology clarification is needed. In claim 1, a "transfer gate" is something that charge transfers through in passing from a photosensor to a charge shift register ("transferring charges, from a contiguous block of the photosensors, through the particular section of the charge transfer gate, to a charge shift register"). In Yonemoto, the structure that provides that function is called a "read gate" instead of a transfer gate (see, for example, column 3, lines 4-8). In Yonemoto, "transfer" refers to vertical movement along the three-stage vertical shift register (for example, from column 3, line 21, signals V2 are called vertical transfer clocks). As illustrated in Yonemoto, figure 2, charges from photosensors flow through read gates to just the center stage of each triplet of vertical shift register stages. Half of the read gates are activated by signal V2a and the remaining half are activated by signal V2b, so that between the two signals all read gates are activated. Accordingly, Yonemoto does not teach activating fewer than all the controllable sections, where "controllable sections" refer to structures for transferring charges from photosensors to a charge shift register.

#### **CLAIMS 5 AND 6 IN LIGHT OF GROUNDS OF REJECTION #2**

No new arguments have been presented regarding claim 5. Applicant rests on the arguments in the Brief on Appeal.

#### **CLAIM 9 IN LIGHT OF GROUNDS OF REJECTION #3**

Claim 9 has now been allowed. All discussion regarding claim 9 in the Brief on Appeal can be ignored.

**CONCLUSION**

In view of the above, applicant respectfully requests that the examiner's rejection of claims 1 and 4-6 be reversed.

Respectfully submitted,

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May 21, 2007

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